



Residential Plan Requirements

PERMIT & CODE INFORMATION

Building plans and permits are required for new construction, building additions and remodeling work for such projects as:

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| § Room additions | § Garage and Carport construction |
| § Patio Covers | § Swimming Pools, Portable Pools, Spas and Hot Tubs |
| § Garage Conversions | § Wood decks 30 inches or more above grade |
| § Roof Conversions | § Playhouses, storage buildings, trellises, gazebos, and similar structures more than 120 square feet in floor area. Planning and Engineering approval is required for such structures regardless of size. |
| § Fences more than 6 foot in height | |

Separate permits are required for plumbing, mechanical and electrical work associated with new construction or remodeling

1. **PLANS REQUIRED.** Most construction and remodeling projects require submittal of plans. Specific plan requirements will depend largely upon the extent, nature and complexity of the work to be done. The following are guidelines for preparation and submittal of plans.
2. **PROJECT INFORMATION.** On the first sheet of the plans, provide the following information:
 - q **Name of Designer:** The printed name, address, telephone number and signature of the person who prepared the plans.
 - q **Address and Owner:** The name of the legal owner of the property and the street address of the property.
 - q **Scope of Work:** State the complete scope of work for this permit.
 - q **Building Area:** For residential additions or garage conversions, state the area in square feet of the existing house, the garage to be converted or the addition to be added and the total building area after the conversion or addition.
 - q **Building Codes:** State the current building codes in effect as the 2001 CBC, 2001 CPC, 2001 CMC, 2004 CEC, 2001 CMC and 2005 California Residential Energy Standards.
3. **ARCHITECTURAL PLANS REQUIRED.** The following are minimum plan requirements for most projects.
 - q **Plot Plan:** Show location of the existing building or buildings on the site. Show front, side and rear yard setback dimensions, dimensions to easements, and dimensions between buildings if there is more than one building on the site. Include patio covers and porch footprints, if any.
 - q **Floor Plan:** The Floor Plan must show existing rooms, new rooms and rooms to be modified. Label the use of each room and provide room dimensions and door and window sizes for new, existing and/or modified rooms. Where work is limited to a new detached accessory structure and the existing main building is not being altered or remodeled, a floor plan of the main building is not required.
 - q **Elevations:** Show exterior elevations or views of all sides of the building that will have new doors, windows, siding or other new construction. A minimum of one (1) exterior elevation should be provided along with exterior materials and notations.
 - q **Details and Notes:** Include all construction details such as changes in floor elevations and floor transitions from concrete to wood, if any, and details of how new additions are connected to existing buildings.

4. **STRUCTURAL PLANS**

- q **Foundation Plan:** Indicate existing and new foundations, type of foundation, and size and depth of footings or piers and grade beams.
- q **Floor Framing Plan:** For wood floors, provide framing member size and spacing, type and length of shear walls, holddowns (if any) and supports.
- q **Roof Framing Plan:** Indicate size and spacing of roof framing members and indicate any required modifications of the existing roof plan.
- q **Sections and Details:** For engineered designs, provide shear transfer details and construction connections.
- q **Structural Design Calculations:** For non-conventional construction, provide structural calculations for vertical load carrying members and for the lateral force resisting system.

5. **PLAN PREPARATION REQUIREMENTS.**

- q **Plan Size:** The minimum sheet size for residential plans is 17 inches x 22 inches.
- q **Sets of Plans:** At least 5 sets of plans are required for the initial submittal to the Building Division.
- q **Clarity:** All plans shall be prepared to be sufficiently readable and clear for a microfilm record. Pencil drawings are not acceptable but copies of pencil drawings can be submitted provided copies are readable and have good contrast.
- q **Dimensions:** Plot Plans, Floor Plans and other plan drawings shall be fully dimensioned and shall have a north arrow.
- q **Scale:** All drawings shall be drawn to an adequate scale with the scale indicated. Recommended scales for drawings are:

Plot Plans:	1/8"=1', 1"=10' or 1"=20'	Floor and Roof Framing:	1/4" = 1'-0" or 1/8" = 1'-0"
Floor Plans:	1/4" = 1'-0"	Building Cross Sections:	1/4" = 1'-0" or 1/2" = 1'-0"
Foundation Plans:	1/4" = 1'-0" or 1/8" = 1'-0"	Exterior Elevations:	1/8" = 1'-0" or 1/4" = 1'-0"
Construction Details:	3/4" = 1'-0"		

- q **Existing (e) and New (n) Construction:** When an existing building is being altered or remodeled, be sure to label all new (n) and existing (e) construction, components and fixtures to distinguish between new work to be done and the existing work.
- q **Completeness:** Please remember, the more complete and accurate the drawings and submittal documents, the sooner a building permit can be issued.

6. **ROOM REQUIREMENTS.** When residential buildings are being constructed, altered or remodeled, some of the more important room requirements include the following. Be sure to include this information in your plans:

- q **Ceiling heights:** Ceilings shall be at least 7'-6" in height in habitable rooms (bedrooms, living rooms, dining rooms) and not less than 7'-0" high in kitchens and in other non-habitable rooms such as laundry, storage and bathrooms.
- q **Room dimensions:** The minimum length or width of any habitable room shall not be less than 7'-0" clear. The minimum area of any habitable room shall not be less than 70 square feet.
- q **Light and ventilation:** In habitable rooms, provide natural light and ventilation with openable windows. Windows shall not be less than 10% of the floor area of each room nor less than 10.0 square feet in area. One-half (1/2) the required window area shall be openable to the exterior for ventilation. Bathrooms may have an openable window of 1.5 s.f. in area. Non-habitable rooms, including bathrooms, may be ventilated with exhaust fans.

- q **Emergency escape windows.** Each new bedroom or sleeping room shall have an emergency escape window that is at least 20" in width (net), 24" in height (net) when open and have an openable area of at least 5.7 square feet in area. Escape windows shall be installed with a sill height no more than 44" above the floor.
- q **Heating.** All habitable rooms must have a heating system capable of maintaining a room temperature of 70° F at a location 3 feet above the floor. Indicate on the plans the heating system or method to be used.

7. BUILDING REQUIREMENTS. When residential buildings are being constructed, altered or remodeled, some of the more important room requirements include the following. Be sure to include this information in your plans:

- q **Attic access:** Provide access to attic space with an access door at least 22" x 30" in size. Locate the access door where there is at least 30" of clear head space in the attic.
- q **Attic ventilation:** Attics must be ventilated with total area of attic vents at least 1.0 s.f. (net) for each 150 s.f. of attic area to be ventilated. Indicate on the plans the size, location and type of each vent.
- q **Smoke detectors:** When the value of the work exceeds \$1000, smoke detectors in each bedroom in the house, in the hall between the kitchen and each bedroom and outside each bedroom door are required. In existing construction, detectors may be battery operated. In new construction detectors must be 120 volt operated with battery backup.
- q **Spark arrestor:** When the value of the work exceeds \$1000, a spark arrestor must be installed on fireplace chimneys if one does not exist.
- q **Exterior doors:** Each new exterior door requires an exterior level landing that extends out from the house at least 36" and a porch light switched from inside the door.

8. FOUNDATION REQUIREMENTS

- q **Foundation systems:** For residential additions, new foundations must match the existing foundation type. For example, if the original foundation is a pier and grade beam type, the new foundation must also be a pier and grade beam type. Otherwise, the foundation must be an engineered system prepared by a registered engineer and with a soil report.
- q **Sill plates:** Sill plates for new walls that bear on concrete must be pressure-treated wood or Foundation Grade Redwood.
- q **Garage Conversions:** For new walls at garage door (between driveway and Garage), provide a concrete curb on which the wall shall bear. The curb shall be at least 5 1/2" high x 5 1/2" wide with 1-#4 continuous steel reinforcing bar. Include a #4 dowel at 24" on center embedded and epoxied 3" into existing concrete floor slab. Extend each 2nd dowel through the sill plate with a 2' x 2" x 3/16" plate washers.

9. MECHANICAL, PLUMBING and ELECTRICAL REQUIREMENTS

- q **Convenience outlets:** Indicate on the plans locations of all convenience receptacles or outlets. In habitable rooms, space outlets on each wall that is 2' or wider, not more than 6' from doors or openings and no more than 12' on center along walls.
- q **Arc Fault Interrupters:** In new and remodeled bedrooms, branch circuits must be protected with arc-fault circuit interrupters.
- q **GFI protection:** All bathrooms, kitchen counter and non-dedicated garage convenience outlets must be GFI protected. All exterior outlets must be GFI protected and waterproof (WP).

- q **Gas water heaters or furnaces:** Gas appliances may not be installed in a bedroom, bathroom or clothes closet.
- q **Water closet (or toilet) clearances:** Toilets must have a clear space at least 30 inches wide and have a clear space at least 24 inches in front.
- q **Shower stalls:** Showers must have a clear inside curb dimension of 30", accommodate a 30" diameter turning circle and have a total area of at least 1,024 square inches in area

10. ENERGY REQUIREMENTS

- q **Insulation.** Indicate on the plans exterior wall, ceiling and underfloor insulation. Minimum insulation without energy calculations (CEC Package 'D') is: Walls R-13, ceilings R-30 and raised floor R-19.
- q **Energy compliance.** Provide energy and heat loss calculations and reproduce on the plans CEC Forms CF-1R and MF-1R. As an alternate to providing calculations, conform to State of California 'Package D' requirements. Note that Package D requires windows and glazing with a SHGC factor of 0.40 or better and a U Factor of 0.67 or better.

PLAN NOTES AND PERMIT INFORMATION:

1. The person who prepared the plans must sign all plans. If any of the plan sheets are prepared by a licensed architect or registered engineer, that individual must stamp and "wet" sign at least two copies of each of the sheets he or she has prepared in accordance with the California Business and Professions Code prior to permit issuance.
2. A Certificate of Compliance substantiating that necessary school impact fees have been paid must be provided to the City prior to issuance of a building permit. Note that residential additions of less than 500 square feet in area are exempt from school impact fees. Contact Nawal Stanojevic at (408) 945-2304, Milpitas Unified School District, Bldg 200, Rm 205, 1331 East Calaveras Blvd., Milpitas, CA 95035.
3. If one or more of the required items mentioned above are omitted from the submittal plans, the application may be considered incomplete and may not be ready for City review.
4. A Building Permit may be issued only to a State of California Licensed Contractor or the Homeowner
5. If the Homeowner is planning to **hire** workers, State Law requires the Homeowner to obtain Worker's Compensation Insurance. Proof of this insurance is required prior to issuance of a Building Permit.
6. Building Permits may be issued to a Homeowner for construction if that Homeowner indicates the intent to do his or her own work personally. If the inspection indicates the Homeowner is unable to perform the work satisfactorily, then a licensed contractor must perform the work.

OTHER CITY DEPARTMENTS REQUIREMENTS:

Engineering Division: If the property is located in the special flood hazard area, contact Engineering at (408) 586-3327 prior to beginning any plan preparation.